1.0 TransEagle® Software Guide

1.1 Introduction

The TransEagle® Network software package works hand-in-hand with the Eagle Series Printer to provide a robust remote print control environment. It provides remote print control to up to five Eagle printers using a 10 Base T, 10Mb/sec connection networking model. The network connectivity model employed with TransEagle® is comprised of *TCP/IP* and *FTP client/server* network "channels". Connectivity is provided via a *single network cable connection*.

TransEagle® can be installed on your PC from the CD that comes with your system. It is designed to perform best with a Pentium 90Mhz processor or better running Windows 95/98/NT4/2000. You must also have a 10 base T Network Interface Card (Ethernet Card) installed on your PC. (Note: the Ethernet connection on the Eagle is now standard. Some older printers may not have the Ethernet option installed and would need to be upgraded before you could connect your Eagle to your PC using the TransEagle® software).

This section is current for version 3.10 of TransEagle®.

1.2 Getting Connected

Before running TransEagle® the first time, make sure the following configurations are in place.

1.2.1 Cable connection

If a direct connection is desired between the host system and a single Eagle printer the use of a <u>crossover 10Mb/sec network cable complete with RJ-45 connectors</u> is required to effect the connection. Plug one end of the crossover cable into the Eagle printer and the other end of the cable into the host system Network Interface Card.

If multiple Eagle printers are to be connected then a network hub or other routing device must be utilized. Please refer to the topology and connection scheme provided by the hub manufacturer for host and Eagle hardware connectivity. Typically one would attach <u>straight</u> network cables between the hub and or router directly to each Eagle printer. The host system would then attach to the hub or to another concentrator device that provides a path to the Eagle hub and or individual systems etc.

1.2.2 Eagle Network settings

You will need to choose an IP Address for your Eagle. If you are using a direct connection to your PC, then we recommend that you use the default address of 192.168.2.3. If your Eagle already has this address, then you are ready to go to 1.2.3. To check your Eagle's current IP address, press Ctrl-W on the Eagle's handheld terminal to bring up the network screen (see figure 1.2.1).
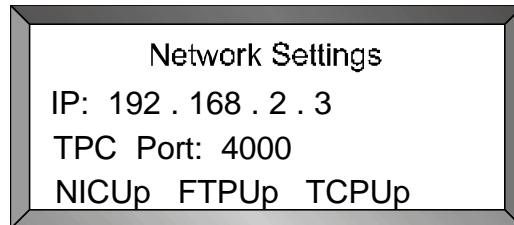
```
          Network Settings
  IP:  192 . 168 . 2 . 3
  TPC  Port:  4000
  NICUp   FTPUp   TCPUp
```

Figure 1.2.1 Network Screen on Eagle

If you are connecting to more that one Eagle, then you will need to give a different address to each Eagle. Choose numbers with the last digit close to each other. For example, Eagle 1: 192.168.2.3, Eagle 2: 192.168.2.4, Eagle 3: 192.168.2.5, etc.

Finally, if you are connecting to a PC that is already a part of a local office network, then you will need to check with your network administrator to find an available IP address for your Eagle printer that fits into your existing network IP scheme.

Once you choose an IP address for your Eagle, you will need to change the Eagle to the new address, if necessary, by following these steps:

1. Press Ctrl-W to jump to the network screen (see figure 1.2.1).
2. Press EDIT (F4) twice to bring up a blinking block cursor beside the IP address.
3. Press Ctrl-X to clear the existing address.
4. Type the IP address you want to change to. You must supply the period between numbers.
5. Press ENTER once.
6. Press "Y" (yes) to confirm.
7. Press ENTER again.

The new IP address is saved automatically to the Eagle and will remain even after the power to the Eagle is turned off.

1.2.3 Network Configuration on Your PC

Now, you will need to choose an IP address for your PC. If you are already on a local office network and you have obtained and entered an IP address on the Eagle as described above, you shouldn't need to make any changes to your PC. Skip to 1.2.4. Otherwise, if you are not already on a local network, then simply choose an address whose last number is close to that of the Eagle(s). If you are using the default address of 192.168.2.3 on your Eagle, for example, then it is recommended that you choose something like 192.168.2.1 for your PC.

Change network configuration settings and specify an IP address as follows:

1. Right click the Network Neighborhood icon on your desktop and go to "Properties". If you do not have a Network Neighborhood icon on your desktop, click Start->Settings->Control Panel->Network or Network Settings.
2. Find the listing with TCP/IP. Depending on what version of Windows you are running, it may be under Configuration, Protocol, or Local Area Network.
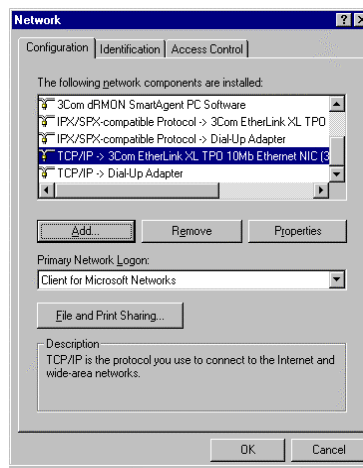

Figure 1.2.2 Example of Network Configuration Dialog on PC

3. Click on the TCP/IP Protocol from the list that is bound to your Eagle (i.e. the TCP/IP item with your Ethernet card shown beside it or, on some systems, simply "TCP/IP" by itself). Figure 1.2.2 shows an example of what the dialog may look like with TCP/IP selected.
4. Click on the "Properties" buttons.
5. Select the "IP Address" tab on the TCP/IP properties dialog (see figure 1.2.3 for an example of what this dialog may look like).
6. Click the "Specify an IP Address" radio button.
7. Enter the IP address you chose for your PC in the "IP address" text box.
8. Enter a subnet address mask in the appropriate box. Use 255.255.255.0.
9. Click "OK"

10. Click "OK" again at the main network screen.
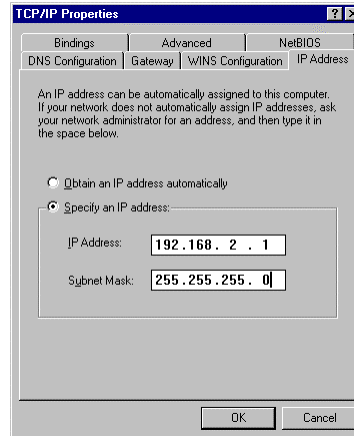11. If asked to re-boot your computer, do so at this time

Figure 1.2.3 Example of TCP/IP Properties Dialog on Your PC

1.2.4 Configuring TransEagle® and Making a Connection

Once you have run the Leader Installation CD, you will notice that an icon for TransEagle® will have been added to your desktop (also to the start menu). Double-click on the TransEagle® icon to launch the program. You should immediately be given a dialog asking if you would like to re-establish your network connection. Since this is the first time you will be attempting to make a connection to your Eagle, select NO. The TransEagle® program is shown in figure 1.2.4.
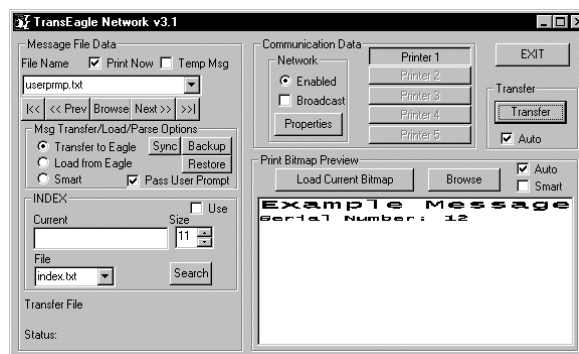

Figure 1.2.4 TransEagle® Program

Note that the state of the Network->Enabled radio button on your screen will currently be *disabled* since you have not yet made a connection. Click the "Properties" button under Network. You will see the dialog shown in figure 1.2.5.
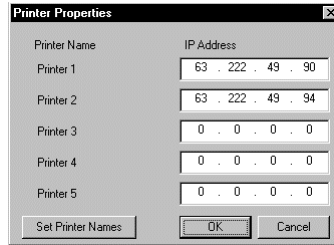
Figure 1.2.5 TransEagle® Network Properties

Type the IP address on the *Eagle Printer* into Printer 1. This value can be found by pressing Ctrl-W on the handheld terminal (see figure 1.2.1). Type the IP addresses of any additional printers (up to 5) you will be networking to into Printer 2-5.

Before clicking OK, check that your network cable is plugged into both the Eagle and the PC and that the Eagle is powered on and has the right IP address. Click OK. Upon clicking OK, TransEagle® will attempt to connect to the Eagle(s). You will know in a few seconds if the attempt was successful as the Network->Enabled radio button will become enabled.

If you still are seeing an hourglass after 10-15 seconds, you most likely have a network problem. TransEagle® will take about a minute to finally time out and give you an error indicating that the connection was not successful. If this happens, go through the configurations of the Eagle and the PC one more time, double-checking that all the IP addresses are typed in correctly, and that you have the right type of network cable. For example, if you are connecting directly from your PC to the Eagle, a common mistake is to use a straight cable rather that a crossover cable. You can check this by unplugging the cable and holding the two ends side-by-side to check the wiring. Make sure the ends of the cable are both facing the same direction and you will be able to recognize a straight cable by noticing that the colored wires are in the same order on both ends. If not, then you most likely have a crossover cable. Usually, double-checking all the configurations and the cable will solve the problem and you will be able to connect successfully by following this procedure again.

Once you are connected, you will be able to send files directly from ImageMaster to the Eagle. Simply leave TransEagle® running in the background, launch ImageMaster and create and send messages at will.

If you close TransEagle® and launch it again at a later time, you will again be asked if you would like to re-establish your network connections. If you connected successfully in your last TransEagle® session and all connected Eagles are powered on and ready, then you merely need to click YES at this point to re-connect.

1.3 TransEagle® Features and Settings

1.3.1 Communication Data Area

As we have already seen, this area of TransEagle® includes commands related to the configuration of network connections to Eagle printers.

1.3.1.1 Enabled Radio Button

This non-editable radio button shows the status of TransEagle's® connections. If any of the printers you attempted to connect to were successfully connected, then the radio button will be enabled.

1.3.1.2 Broadcast Checkbox

Check this box to have TransEagle® send messages to *all* connected Eagles at one time whenever a message is transferred, either from ImageMaster or directly from TransEagle® (see below to learn how to transfer files). If unchecked, then messages will only be transferred to the *selected* Eagle printer (see 1.3.1.4).

1.3.1.3 Properties Button

Click this button to set the IP address of all connected Eagles (see figure 1.2.5). You will also see a button on the Eagle IP dialog labeled "Set Printer Names". Click this if you wish to be able to give a meaningful name to each Eagle printer you are connected to. The names appear on each of the printer buttons in the same area.

1.3.1.4 Printer buttons

These five buttons shows all the printers that you are currently connected to. Any button that is enabled corresponds to a printer that is connected. Click on any one of the enabled buttons to select that printer as the current one to send messages to. See 1.3.1.3 to learn how to give the printers listed on the buttons meaningful names

1.3.2 Message File Data Area

This area contains commands for selecting files to send to the Eagle.

1.3.2.1 File Name

This drop-down allows you to select from a list of message files comprised of the files that reside in the designated message directory for the currently selected Eagle printer. The directory is called "Eaglex" and is under the working directory of TransEagle® (where x is the printer number that you currently have selected). For example, for printer 1 and a standard installation, that directory is "c:\Leader Corporation\Eagle1".

If you have "auto" checked in the Transfer Area, then the message will be sent to the Eagle immediately when you select it from the drop-down. Otherwise, the message you selected will not be sent until the "Transfer" button is clicked. All transferred messages that have imbedded bitmap files will automatically look in the "Graphics" directory under "Eaglex" and transfer those bitmaps to the Eagle automatically. You will receive an error if any requested bitmaps are not present in that directory.

1.3.2.2 Print Now Checkbox

Check this to have any transferred message files immediately become the active print file on the Eagle. If not checked, then files that are transferred are merely saved to the disk for later recall.

1.3.2.3 Temp Msg Checkbox

Check this to have files that are sent over for immediate printing *not* be saved to the Eagle disk. The file will print, but could not be later recalled from the Eagle handheld terminal. This is to conserve disk space if you are sending many files over for printing.

1.3.2.4 Navigation Buttons for Selecting Messages

These buttons offer some unique methods of recalling files for doing special presentations, etc. The "|<<" and "|>>"buttons will select the first and last message (alphabetically) in the message directory, respectively. The "<<Prev" and "Next>>" buttons will step through the files in the directory in alphabetical order, either forward or back ward, respectively. The Browse button allows you to select messages from a standard "File Open" type of dialog.

1.3.3 Transfer Area

1.3.3.1 Transfer Button

This button sends the current file shown in the File Name drop-down to the Eagle.

1.3.3.2 Auto Checkbox (Transfer)

If checked, then <u>any file you select in the Message File Data area will be immediately sent to the Eagle</u>, rather than waiting until you click the Transfer button.

1.3.4 Msg Transfer/Load/Parse Options

1.3.4.1 Transfer to Eagle/Load To Eagle/Smart Radio Buttons

These options toggle TransEagle's® file transfer functionality between receiving from the Eagle, Loading to the Eagle, or determining smartly which function to perform.

1.3.4.2 Backup/Restore/Sync Buttons

Under development.

1.3.4.3 Pass User Prompt Checkbox

Check this box if you would like for user prompts contained in your messages to be sent to the Eagle "as is" so that the operator at the handheld terminal is responsible for entering the requested user data. If not checked, TransEagle® will ask you to enter any user data at the PC when transferring a file and the data you enter will be sent to the Eagle rather than the user prompt.

1.3.5 Index Area

This allows you to create an index of your messages with up to a 20-digit code. Used with a scanner provides point and shoot printing. Enable this function by clicking the Use button. Scan or type in your index code and the corresponding print message file will be transferred. The File Combo Box shows the name of the index file currently in use, default is index.txt. Size allows you to set the length of your index codes up to 20 digits with 11 digits as the default. Use Search when the index code is shorter than the target size you set.

1.3.6 Print Bitmap Preview Area

This window shows what is currently being printed on the selected Eagle. You can also browse other bitmaps and click "Load Current Bitmap" to return to the current settings. Clicking anywhere on the bitmap preview screen enlarges the preview. "Auto" forces the automatic return of a print bitmap with each message file selected. "Smart" allows a previously received print bitmap to be displayed without forcing a download from the Eagle.